



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,235	07/31/2003	Steven W. Reichenthal	BOI-0251US	2460
60483	7590	03/09/2007		
LEE & HAYES, PLLC 421 W. RIVERSIDE AVE. SUITE 500 SPOKANE, WA 99201			EXAMINER THERIAULT, STEVEN B	
			ART UNIT 2179	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			03/09/2007	
			DELIVERY MODE PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/633,235	REICHENTHAL ET AL.	
	Examiner	Art Unit	
	Steven B. Theriault	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

Art Unit: 2179

### DETAILED ACTION

1. This action is responsive to the following communications: Non-provisional application filed 07/31/2003.
2. Claims 1 -49 are pending in the case. Claims 1, 13, 20, 37, and 43 are the independent claims.

#### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-36 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The language of the claims raise a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

With regard to **claims 1-36**, claims 1-36 recite claim limitations that are not directed to a statutory class of invention as the claimed system refers to software components in a graphical interface within a system. The system is not a process, machine, article of manufacture or composition of matter because it appears that the structure to make the interface available on the display is not claimed and is software per-se.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2179

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-2, 12 are rejected under 35 U.S.C. 102(e) as being anticipated by over Perry et al. U.S. Patent No. 6,945,780 issued Sept. 20, 2005 and filed Apr. 2, 2001.**

In regard to **Independent claim 1**, Perry teaches a graphical user interface input device for creating and editing a simulation model, the device comprising:

- A first component configured to enter and edit platforms and associated attributes, wherein the platforms have been determined to be included within the simulation model (See column 6, lines 1-27). Perry teaches a component allowing a user to add different platforms to the simulation model and allowing the user to edit the model (See also column 9, lines 5-25).
- A second component configured to enter and edit commodities (See Figure 10) Perry shows an example of a component configures to enter commodities.
- A third component configured to perform one of assigning or removing a commodity to or from a platform (See Figure 5). Perry shows assigning the commodities to the platform.

With respect to **dependent claim 2**, Perry teaches the device further comprising a fourth component configured to create and edit a scenario (See Figure 3a and 11) Perry shows a scenario entry and editing component.

With respect to **dependent claim 12**, Perry teaches the device wherein the simulation model is created using a simulation reference modeling language (See column 7, lines 60-67 and column 8, lines 1-12).

***Claim Rejections - 35 USC § 103***

5. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. **Claims 3-11 are rejected under 35 U.S.C 103(a) as being unpatentable over Perry et al. U.S. Patent No. 6,945,780 issued Sept. 20, 2005 and filed Apr. 2, 2001.**

Art Unit: 2179

With respect to claims 3-11, as indicated in the above discussion Perry teaches each limitation of claim 1.

The present application specification does not provide an intrinsic definition of a pulse or a segment and therefore the Examiner will interpret in the broadest reasonable interpretation the meanings as known to one of ordinary skill in the art. The specification does provide evidence in Figure 5 of a process by which attributes of a battle are added or deleted. The pulse or segment is interpreted from figure 5 as providing further detail of a phase and type of attack that may be used. Therefore, based on the figure the Examiner interprets the pulse and segment as data attributes of a given simulation.

Perry teaches a process by which the user can assign data attributes to a given simulation. Perry teaches the data structures are sent to simulation model that performs a simulation of a weapon in a real world scenario. Elements of a scenario can be input via the interface (See figure 5 and column 9, lines 1-25). The interface shown in figure 15 allows a user to enter element of a scenario and figures 3-12 show a process of entering and editing information for a given platform.

Perry does not expressly teach a component to add or delete a pulse to a scenario; to view the details of a pulse; to add or delete a pulse to a scenario; to add or delete a segment to a pulse, or to define attributes of a platform or segment added to a pulse.

However, these limitations would have been obvious to one of ordinary skill in the art having the teachings of Perry in front of the them, in view of Perry, because Perry teaches that through the graphical interface the user can access the dependencies mode and identify attributes and parameters that are assigned within the model and add, delete values as they choose. " A user can then select **any** input value and generate visual cues, for example check boxes, of all down stream parameters that would be affected by a change in input." Perry also teaches a sensitivities mode that allows a user to adjust design parameters that would effect the performance of the weapon during simulation (See Perry column 8, lines 29-67 and figure 3 and

Art Unit: 2179

5). A textfield or a combobox dropdown are components that the skilled artisan would allow the user to either enter or select or visa-versa to add or delete information.

Moreover, Figures 6-11 shows a variety of components that allow the user to add, delete, or change a variety of inputs or data attributes that would change the simulation. The data attributes are then saved and sent to a simulation model to be executed on a variety of combat models (See column 9, lines 1-25). Therefore, the structure of Perry provides an interface that comprises components that allow the user to add and delete data attributes of a simulation model. The motivation or suggestion in Perry comes from the statement that one of ordinary skill in the art would be aware that a multitude of interface designs can be employed (See column 10, lines 43-46).

7. **Claims 13-49 are rejected under 35 U.S.C 103(a) as being unpatentable over Perry et al. (hereinafter Perry) U.S. Patent No. 6,945,780 issued Sept. 20, 2005 and filed Apr. 2, 2001 in view of Sinex et al. (hereinafter Sinex) "Linking warfighting and logistics" 2000.**

In regard to **Independent claim 13**, Perry teaches the graphical user interface output device for presenting a model simulated within a scenario, the device comprising:

- One or more platform directory structures configured to store platform information based on platform type (Perry column 8, lines 1-12). Perry teaches that a variety of weapons types can be included in the system and selected in figure 10.

Perry does not expressly teach:

- A directory structure including: a plurality of organizational units, each organizational unit being determined to be included within the model to be simulated

Sinex teaches a warfighting simulation system that allows the user to see a directory of organizations that are scheduled and actively participating in a simulated battle (See page 290, left and page 293). Sinex and Perry are analogous art because they both teach simulation

systems and the both teach battlefield simulations. They also both teach the creation of models to simulate interaction and the ability to select a given weapon or unit from the interface.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention having the teaching of Sinex and Perry in front of them to modify the system of Perry to include data attributes of an organization where a user can select a given unit from a list. The motivation to combine Sinex with Perry comes from the suggestion in Sinex to provide not only the logistics of a given weapon or organization but also to link it to the warfighting scenario (See page 290, left).

With respect to **dependent claim 14**, Perry teaches the device further comprising a commodities output area configured to present commodity usage information (See Perry figure 5 and column 11, lines 25-67).

With respect to **dependent claim 15**, Perry teaches the device wherein the commodities output area includes a commodities usage list configured to present commodity usage information of one of a platform, group of platforms, or organizational unit selected in the directory structure (See Perry figure 5 and column 11, lines 25-67).

With respect to **dependent claim 16**, Perry teaches the device wherein the commodities output area includes a component configured to present effectiveness information (See Perry figure 16 and column 8, lines 55-67 and column 14, lines 1-45).

With respect to **dependent claim 17**, Perry teaches the device wherein the commodities output area further includes a graph for presenting commodity usage over time based on one of the selected operational unit, platform, or group of platforms from the directory structure and a commodity selected from the commodities output area (Perry column 8, lines 20-25).



With respect to **dependent claim 18**, Perry teaches the device wherein the commodities output area includes a color component configured to display a color patch adjacent to commodity usage information, wherein the color component presents a color based on commodity usage in the simulation model (See Figure 19 and column 14, lines 55-67 and column 15, lines 1-20).

With respect to **dependent claim 19**, Perry teaches the device wherein the simulation model is created using a simulation reference modeling language (See column 7, lines 60-67 and column 8, lines 1-12).

In regard to **Independent claim 20**, Perry teaches a graphical user interface device for creating and editing a simulation model and presenting the simulation model run within a scenario, the device comprising:

- A first component configured to enter and edit platforms and associated attributes, wherein the platforms have been determined to be included within the simulation model (See column 6, lines 1-27). Perry teaches a component allowing a user to add different platforms to the simulation model and allowing the user to edit the model (See also column 9, lines 5-25).
- A second component configured to enter and edit commodities (See Figure 10) Perry shows an example of a component configured to enter commodities.
- A third component configured to perform one of assigning or removing a commodity to or from a platform (See Figure 5). Perry shows assigning the commodities to the platform.
- One or more platform directory structures configured to store platform information based on platform type (Perry column 8, lines 1-12). Perry teaches that a variety of weapons types can be included in the system and selected in figure 10.

Perry does not expressly teach:

Art Unit: 2179

- A directory structure including: a plurality of organizational units, each organizational unit being determined to be included within the model to be simulated

Sinex teaches a warfighting simulation system that allows the user to see a directory of organizations that are scheduled and actively participating in a simulated battle (See page 290, left and page 293). Sinex and Perry are analogous art because they both teach simulation systems and the both teach battlefield simulations. They also both teach the creation of models to simulate interaction and the ability to select a given weapon or unit from the interface.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of invention having the teaching of Sinex and Perry in front of them to modify the system of Perry to include data attributes of an organization where a user can select a given unit from a list. The motivation to combine Sinex with Perry comes from the suggestion in Sinex to provide not only the logistics of a given weapon or organization but also to link it to the warfighting scenario (See page 290, left).

With respect to **dependent claim 21**, Perry teaches the device further comprising a fourth component configured to create and edit a scenario (Perry figure 11).

With respect to **claims 22-30**, as indicated in the above discussion Perry in view of Sinex teaches each limitation of claim 13.

The present application specification does not provide an intrinsic definition of a pulse or a segment and therefore the Examiner will interpret in the broadest reasonable interpretation the meanings as known to one of ordinary skill in the art. The specification does provide evidence in Figure 5 of a process by which attributes of a battle are added or deleted. The pulse or segment is interpreted from figure 5 as providing further detail of a phase and type of attack that may be used. Therefore, based on the figure the Examiner interprets the pulse and segment as data attributes of a given simulation.

Perry teaches a process by which the user can assign data attributes to a given simulation. Perry teaches the data structures are sent to simulation model that performs a simulation of a weapon in a real world scenario. Elements of a scenario can be input via the interface (See figure 5 and column 9, lines 1-25). The interface shown in figure 15 allows a user to enter element of a scenario and figures 3-12 show a process of entering and editing information for a given platform.

Perry does not expressly teach a component to add or delete a pulse to a scenario; to view the details of a pulse; to add or delete a pulse to a scenario; to add or delete a segment to a pulse, or to define attributes of a platform or segment added to a pulse.

However, these limitations would have been obvious to one of ordinary skill in the art having the teachings of Perry in front of the them, in view of Perry, because Perry teaches that through the graphical interface the user can access the dependencies mode and identify attributes and parameters that are assigned within the model and add, delete values as they choose. "A user can then select **any** input value and generate visual cues, for example check boxes, of all down stream parameters that would be affected by a change in input." Perry also teaches a sensitivities mode that allows a user to adjust design parameters that would effect the performance of the weapon during simulation (See Perry column 8, lines 29-67 and figure 3 and 5). A textfield or a combobox dropdown are components that the skilled artisan would allow the user to either enter or select or visa-versa to add or delete information.

Moreover, Figures 6-11 shows a variety of components that allow the user to add, delete, or change a variety of inputs or data attributes that would change the simulation. The data attributes are then saved and sent to a simulation model to be executed on a variety of combat models (See column 9, lines 1-25). Therefore, the structure of Perry provides an interface that comprises components that allow the user to add and delete data attributes of a simulation model. The motivation or suggestion in Perry comes from the statement that one of ordinary skill in the art would be aware that a multitude of interface designs can be employed (See column 10, lines 43-46).

With respect to **dependent claim 31**, Perry teaches the device further comprising a commodities output area configured to present commodity usage information (See Perry figure 5 and column 11, lines 25-67).

With respect to **dependent claim 32**, Perry teaches the device wherein the commodities output area includes a commodities usage list configured to present the commodity usage information of one of a platform, group of platforms, or organizational unit selected in the directory structure (See Perry figure 5 and column 11, lines 25-67).

With respect to **dependent claim 33**, Perry teaches the device wherein the commodities output area includes a component configured to present effectiveness information (See Perry figure 16 and column 8, lines 55-67 and column 14, lines 1-45).

With respect to **dependent claim 34**, Perry teaches the device wherein the commodities output area further includes a graph for presenting commodity usage over time based on one of the selected operational unit, platform, or group of platforms from the directory structure and a commodity selected from the commodities output area (Perry column 8, lines 20-25).

With respect to **dependent claim 35**, Perry teaches the device wherein the commodities output area includes a color component configured to display a color patch adjacent to commodity usage information, wherein the color component presents a color based on commodity usage in the simulation model (See Figure 19 and column 14, lines 55-67 and column 15, lines 1-20).

With respect to **dependent claim 36**, Perry teaches the device wherein the simulation model is created using a simulation reference modeling language (See column 7, lines 60-67 and column 8, lines 1-12).

Art Unit: 2179

In regard to **claims 37-42**, claims 37-42 reflects the method comprising steps for performing the limitations of the graphical interface claims 13-19, respectively, are rejected along the same rationale.

In regard to **claims 43-49**, claims 43-49 reflects the system comprising computer readable instructions for performing the limitations of the graphical interface claims 13-19, respectively, are rejected along the same rationale.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M-F 7:30 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SBT

**WEILUN LO**  
**SUPERVISORY PATENT EXAMINER**